

Guidance Document for the Management of Suspected and Confirmed Cases of Ebola in the State of Ohio

June 3, 2019

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I. Introduction

A. Purpose

The purpose of this Guidance Document is to inform local, state, and federal partners; relevant agencies and organizations; and other stakeholders about response plans to a single case or an outbreak of Ebola Virus Disease (EVD) in the state of Ohio. This document is specific to the management of EVD; however, the concepts may be applied to other novel highly infectious disease. Protocols and references outlined in this document will be updated as national and state guidelines change.

B. Scope

This document is limited to describing operational intent and systems when responding to Persons Under Investigation (PUI) or patient(s) confirmed with EVD. Ohio maintains additional plans that address bioterrorism and other infectious diseases. This document details a system developed for operations within Ohio. The Ohio Department of Health (ODH) is responsible for planning with Health and Human Services (HHS) Region V.

C. Terminology

The [case definition](#) from the CDC for a Person Under Investigation (PUI) is a person who has both consistent signs or symptoms and risk factors as follows should be considered a PUI:

- Elevated body temperature or subjective fever or symptoms, including severe headache, fatigue, muscle pain, vomiting, diarrhea, abdominal pain, or unexplained hemorrhage; **AND**
- An epidemiologic risk factor within the 21 days before the onset of symptoms.

For the purposes of this document, the term “PUI” will be used interchangeably to encompass a Person Under Investigation, a Patient Under Investigation, and a Suspect Patient. All of these terms are meant to refer to a person that meets the symptoms, risk factors, and travel history for Ebola but have not been confirmed by laboratory testing.

A Confirmed Case of Ebola come after laboratory-confirmed diagnostic evidence of Ebola virus infection.

D. Situation Overview

1. 2013-2016 EVD Outbreak

In July 2014, the unprecedented Ebola epidemic prompted the United States (US) Centers for Disease Control and Prevention (CDC) to activate its Emergency Operations Center (EOC) to help coordinate technical assistance and control activities with partners. CDC partnered with other federal agencies, the World Health Organization (WHO), and other domestic and international partners on this global response. CDC activated its Emergency Operations Center (EOC) for the Ebola response on July 9, 2014. On August 5, 2014, CDC elevated the EOC to a Level 1 activation, its highest level. On March 31, 2016, CDC officially deactivated the EOC for the 2014-2016 Ebola response.

CDC’s response was directed simultaneously at controlling the epidemic in West Africa and strengthening preparedness for Ebola in the United States. In response to the increasing concern of Ebola spreading to the United States from air travel, CDC began an enhanced entry screening and post-arrival active monitoring program with state and local health departments

(LHDs) for all inbound air travelers from affected countries. For more about the CDC response to this outbreak, see the [MMWR Supplement: CDC’s Response to the 2014–2016 Ebola Epidemic — West Africa and United States](#) (July 8, 2016).

In December 2014, Congress appropriated [Supplemental Emergency Funding](#) to further support Ebola epidemic efforts domestically and internationally. The Department of Health and Human Services (HHS) Office of the Assistant Secretary for Preparedness and Response (ASPR) and CDC issued four funding opportunity announcements (FOAs) to support Ebola (or novel highly infectious disease) preparedness and response in the United States.

2. 2018 – Present Outbreak

On August 1, 2018, the Ministry of Health of the Democratic Republic of Congo (DRC) reported an outbreak of EVD in North Kivu Province. The outbreak continued with moderate intensity in Eastern DRC. Confirmed and probable cases have been reported in nineteen health zones of North Kivu and Ituri. The area is about 780 miles away from Equateur province, where an Ebola outbreak was reported in May 2018. By November 30, 2018, the 2018 Kivu Ebola outbreak had become the second largest EVD outbreak in recorded history following the 2013-2016 West Africa Outbreak. For more about the outbreak, see the [CDC Ebola site](#).

E. Description of Jurisdiction

According to 2017 estimates, the three cities with the most inhabitants are: the state capitol, Columbus, with 850,106, followed by Cleveland, 388,072, and Cincinnati, 298,550. The remaining Ohio cities with populations greater than 100,000 are Akron, Dayton and Toledo. Additionally, Ohio has 169 cities with populations that range from 10,000 to 100,000 people.

Ohio’s has three international airports. Together, Cleveland-Hopkins International Airport (ranked 43rd busiest in the US) and John Glenn Columbus International Airport (ranked 49th), serve approximately 16 million passengers annually. The James M. Cox International Airport in Dayton (ranked 76th) is classified as a primary commercial service airport. It serves approximately 2 million passengers annually. Although none of the Ohio airports receive direct flights from Ebola-affected countries, they do receive travelers from Ebola-affected countries through connected flights.

Response capacity in Ohio for Ebola includes one ETC, seven Ebola Assessment Hospitals (EAH) and 229 frontline hospitals. Ohio has 113 LHDs and a strong public health infrastructure. LHDs and Emergency Medical Services (EMS) work together within Ohio’s eight preparedness planning regions to coordinate transportation. See [Appendix 5](#).

F. Planning Assumptions

This section describes the assumptions that affect the functioning of a coordinated response to Ebola.

1. The 2014-2016 EVD outbreak prompted significant response from the CDC and health departments to actively screen and monitor returned travelers. This systematic response is currently not active in the US. This Guidance Document includes information based on this systematic response, but this active screening and monitoring may not be in place when a suspect patient is identified locally.
2. Every Ohio hospital is categorized into one of the three categories described by the CDC: ETC, EAH, or Frontline Hospitals. See [Appendix 5](#).

3. All Ohio hospitals can identify symptomatic people whose travel history could suggest possible exposure to Ebola or other diseases endemic to a region.
4. All Ohio hospitals are prepared to use appropriate PPE, isolate patients, provide basic supportive care, and inform and consult with public health officials.
5. PUIs will be transported to an established Ebola EAH within Ohio. Persons diagnosed with EVD will be transported to Ohio's ETC or to a designated regional treatment center.
6. Transportation from a residence or other scene will be to a hospital in reasonable proximity to the scene, which may be a frontline, EAH, or ETC. In no circumstances should any suspected Ebola patient be transported to a "standalone" Emergency Department. With appropriate medical guidance, a PUI may bypass the closest hospital and go directly to an EAH. See [Appendix 4](#).
7. EMS and/or the LHD will notify potential receiving hospitals at the earliest possible opportunity when transporting (or preparing to transport) a PUI or multiple PUIs.
8. Ohio citizens should be provided care within Ohio. However, if the number of cases exceeds the capacity of Ohio's ETC and EAHs, a process is in place to transport the patients to CDC-designated treatment centers. Transportation to a designated regional treatment center is covered in the HHS Region V Transportation Plan.
9. Health officials in each jurisdiction have a plan for transporting one or multiple patients who are suspected with Ebola to one of the established ETC/EAH in Ohio.

G. Ebola Preparedness Roles and Responsibilities

1. Ohio Emerging Pathogens Coalition (OEPC)
The OEPC is coordinated by the Ohio Hospital Association (OHA) and includes members from hospitals (Frontline, EAH, and ETC), LHDs, Regional Healthcare Coordinators (RHCs), Regional Public Health Coordinators (RPHC), local Emergency Medical Services (EMS), and state level agencies (the Ohio Department of Health and Ohio EMS). The OEPC meets quarterly to coordinate planning, training, and exercises across Ohio. There are four work groups that are part of the OEPC: patient care, training and exercise, transportation and public health. Additional workgroups are established, as needed, to address specific needs or tasks.

NOTE: The Public Health Work Group is active only when public health issues arise: at other times coalition members from public health agencies are incorporated into other planning groups.



2. Hospitals in Ohio: All hospitals in Ohio are prepared to ‘Identify, Isolate, Inform’ and collaborate for patient transport. Ohio has seven EAHs with the staffing, training, and critical care capacity to provide evaluation and testing for Ebola. Ohio has one ETC in Cleveland which can treat an Ebola patient for the duration of illness. See [Appendix 5](#).
 - a. If need exceeds capacity in Ohio, the [HHS Region V: Ebola Virus Disease Coordination and Transportation Plan](#) (February 2018) may be activated. Region V includes City of Chicago, Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin.
 - b. The Regional ETC for Region V is University of Minnesota Medical Center in Minneapolis, MN.
3. Ohio Department of Health (ODH): ODH will serve as the lead agency for a suspected or confirmed case Ebola in Ohio. The ODH will lead the implementation of the response plan.
4. Ohio Hospital Association (OHA): The OHA supports education and information sharing among Ohio hospitals at each level in the continuum of Frontline, EAH, and ETC.
5. Ohio Emergency Management Agency (OEMA): OEMA will assist the ODH with resource requests as needed.
6. Centers for Disease Control and Prevention (CDC): The CDC will provide technical assistance to the ODH and the healthcare coalitions to manage confirmed and suspected patients with a novel highly infectious disease. CDC also assessed the Ohio hospitals that serve as the ETC and EAHs.
7. Local Health Departments (LHD): LHDs in the jurisdiction of the PUI’s residence and the treating hospital will conduct case investigation, contact investigation, contact monitoring, quarantine (if necessary), and related public health duties. LHDs will be involved in a decision to transport a patient to one of the CDC-designated EAH or ETC. ODH will support the LHDs.

8. Ohio Division of EMS (OEMS) supports education and information sharing with Ohio's local EMS agencies and serves as the point of contact for Ohio's private medical transportation services.
9. Emergency Medical Services (EMS) agencies in Ohio are expected to be able to recognize patients with significant infectious disease process, use appropriate PPE, and notify the receiving hospital. A subset of EMS agencies has been identified in each region with additional isolation capabilities specifically for transport of Ebola and other high-risk patients. Local EMS contact information is included in the regional plans.
10. Regional Public Health Coordinators (RPHC): Provide planning and response support for LHDs. RPHCs work closely with the LHDs and ODH.
11. ODH Public Health Laboratory (PHL): Prior to events, the ODH PHL maintains laboratory readiness through validation and training. During events, the ODH PHL tests specimens in accordance with CDC protocols and communicates with CDC lab and the regional public health laboratory.
12. Regional Healthcare Coordinators (RHCs): Provide planning and response support for hospitals within their region. RHCs work closely with the OHA and ODH.
13. Hazardous Waste Companies: Hazardous waste companies have ongoing contracts with healthcare facilities and protocols in place for highly infectious materials.
14. Medical Examiners / Coroners / Funeral Homes: Specific mortuaries and crematoriums have been identified that will accept the remains of expired patients with Ebola. See [Appendix 11](#).
15. The Ohio Emergency Response System (OERS) provides for the systematic mobilization, deployment, organization, and management of Ohio's fire service resources (personnel, vehicles, and equipment) to assist local agencies in a major fire, disaster, or other large-scale emergency.
16. The Ohio Intrastate Mutual Aid Compact (IMAC) ([Ohio Revised Code Section 5502.41](#)) was updated on July 3, 2012. IMAC is mutual aid agreement through which all political subdivisions in Ohio can request and receive assistance from any other political subdivisions in the state.

H. Intent

The State of Ohio recognizes the potential of Ebola to affect many people if the disease is transmitted locally. It is also possible that a one case could constitute a public health emergency. Early recognition and evaluation of individuals is critical to limiting exposure to healthcare workers, patients, close contacts, and the community.

I. Key Response Elements

The elements below correspond to Appendices within this Guidance Document. Refer to the [Appendices](#) for additional guidance and information regarding each topic.

1. Persons suspected to have Ebola or other high consequence infectious disease are reported to the LHD. LHDs report to ODH's Bureau of Infectious Diseases (BID). Reporting initiates activation of Response Plans. See [Appendix 1](#).
2. Public Health Active Monitoring for Ebola. In 2019, only Healthcare Workers (HCW) returning from Ebola-affected countries are being monitored. See [Appendix 2](#).
3. Isolation and Quarantine
ODH has outlined the procedures to arrange for the isolation and quarantine of PUIs if necessary. These procedures describe the requirements from other jurisdictional agencies

- to support these measures. This includes measures taken to provide shelter and meals. Should the person later be confirmed with EVD, ODH has plans in place for the decontamination of the residence, waste removal, and quarantine of pets (e.g., dogs and cats). See [Ohio Revised Code \(ORC\) 3701.13](#) and the [Ohio Infectious Disease Control Manual \(IDCM\)](#) Section 5. See [Appendix 3](#).
4. **Transport of PUIs or Confirmed Ebola Patients**

Within Ohio, all transports are managed at the local level. The transportation of PUIs or patients is managed through EMS at the jurisdictional or local level depending on the EMS system. Local EMS must prepare for PUIs, an EVD patient, or patients coming from within the EMS system (9-1-1/PSAP calls); interfacility transfers; or from a port of entry, e.g. an airport. See [Appendix 4](#). CDC has developed guidance for EMS providers that includes patient assessment, safety and PPE, patient management, transport, and decontamination. Only ground transportation will be used. Each region has developed specific transportation plans.
 5. **Implementation of the Healthcare Facility Tiered Strategy**

To create a coordinated networked approach, state, regional, and local health officials, in collaboration with hospital and healthcare facility executives, have designated healthcare facilities across the state to serve in one of three suggested roles outlined in this Guidance Document. See [Appendix 5](#).
 - a. Frontline Hospitals screen (identify), isolate, and collaborate in arranging transport for testing and possibly treatment.
 - b. EAHs screen (identify), isolate, conduct differential/ confirmatory testing and if EVD is confirmed, coordinate transport to a treatment center. If Ebola is not confirmed, treat other diseases e.g. Malaria.
 - c. ETCs can isolate, conduct all testing, and offer treatment under research protocols. The ETC, in collaboration with state and federal partners, may transfer the patient to a RETC. 6. **Hospital Preparation in Support of the Tiered Hospital Strategy**

All hospitals in the Ohio Tiered Hospital Strategy are expected to review their staffing needs for providing care to a patient with Ebola. CDC recommends avoiding use of contracted staff/students/residents to care for Ebola patient. Ohio's EAHs and ETCs have formed teams to provide clinical coverage 24/7. See [Appendix 5](#) and [Appendix 6](#).
 7. **Enhancing Infection Control Procedures**

ODH follows the most current CDC Guidelines for Ebola. See [Appendix 7](#).
 8. **Laboratory Services Support and Coordination**

The ODH Laboratory Services Division has been designated an Advanced Level Reference Laboratory, a part of the [CDC's Laboratory Response Network](#). The network comprises more than 150 labs across the country that can respond to biological and chemical threats, and other public health emergencies. Reference labs can perform tests to detect and confirm the presence of a threat agent, ensuring timely local response. The test is conducted by ODH Lab, but final confirmation is through the CDC. See [Appendix 8](#).
 9. **Waste Management Considerations**

Waste contaminated (or suspected to be contaminated) with Ebola virus is a Category-A infectious substance regulated as a hazardous material under the US Department of Transportation (DOT) Hazardous Materials Regulations (HMR; 49 CFR, Parts 171-180). Requirements in the HMR apply to any material the Department of Transportation (DOT) determines is an unreasonable risk to health, safety, and property when transported in

commerce. For off-site commercial transport of Ebola-associated waste, strict compliance with the HMR is required. See [Appendix 9](#).

10. Personal Protective Equipment (PPE) Resources

PPE plays an important part in response to Ebola for any worker who has the potential for exposure to an infected patient. ODH follows the most current CDC Guidelines for Ebola PPE. See [Appendix 10](#).

11. Mortuary Affairs

Management of remains of the deceased from Ebola rests within the local jurisdictions. Management planning includes hospitals, mortuary providers, and EMS. The Ohio Mortuary Operational Response Team (OMORT) is available for response to assist with transport. BioSeal devices are available from Ohio EAHs/ETC. See [Appendix 11](#).

12. Considerations for Outpatient Settings

Early recognition and evaluation of individuals is key to limiting exposure to healthcare workers, patients, close contacts, and the community. All Ohio healthcare providers should 'Identify, Isolate, Inform.' See [Appendix 12](#).

- a. Outpatient facilities should perform travel screening.
- b. Patients who report a travel history to an Ebola-affected country and who are exhibiting Ebola symptoms should be isolated in a private room with a private bathroom and healthcare workers should follow [CDC Guidance on Personal Protective Equipment \(PPE\)](#).
- c. Call your local health department immediately if a novel or highly infectious disease is suspected.

II. Training and Exercises

A. Recommendations for Conducting Training

Though sections in the Guidance Document recommend training personnel on their own elements, personnel also need to receive training on how their role relates to this plan as a whole within their jurisdiction and region. Leaders need to understand how their organizations and agencies contribute to the proper functioning of the hospital tiered system. All personnel must understand their role in coordinating and communicating with other partners. ODH will explore methods to ensure that the roles and responsibilities training is sustainable (e.g., recorded webinars, online training, detailed presentations) and recommends that personnel review plans and train before conducting exercises. This training will also include how those responsibilities can extend to a response related to other infectious disease responses and public health emergencies. Documenting the training will help identify gaps in educating partners on the various plans and provide opportunity for continuous improvement. See [Appendix 13](#).

B. Recommendations for Conducting Exercises

Specific requirements for the frequency and type of exercises are covered in each of the Ebola grant award administered by the ODH. Additionally, each region is encouraged to exercise all components of the regional plan whenever possible.

C. Final Note

It is our hope that elements of this Guidance Document are clearly articulated, trained, and exercised to reduce the likelihood of Ebola reaching or spreading in Ohio. This Guidance Document includes details necessary for a coordinated response involving government, appropriate agencies and organizations. It will be shared with critical partners and be made available to other interested parties. This document will be reviewed and updated periodically by the ODH starting in February 2021.

APPENDICES

A note regarding the Appendices to the Guidance Document:

- **Appendix 1:** The Algorithms in Appendix 1 were developed with the OEPC and include specific considerations to Ohio and Ohio's response plan.
- **Appendix 2 – 13:** These appendices were compiled from planning guidance and best practices on a national-level and integrated with Ohio-specific considerations. There are sections within each Appendix that list both national and Ohio guidance. Items within the Ohio Guidance section have been developed and/or approved by the OEPC.
- **Appendices 14 – 17:** These Appendices are support information for this guidance document.

Appendix 1: Algorithms for Ebola Response Activation and Transportation

These two algorithms were developed with the help of the Ohio Emerging Pathogens Coalition (OEPC) to codify the conference call process related to a suspect patient.

When a PUI is identified at a hospital, the hospital physician or designated individual will begin the response process by notifying their LHD. If the LHD and hospital agree that the patient meets the criteria as a PUI, the LHD will call ODH. The hospital will call their Regional Healthcare Coordinator. ODH will initiate Algorithm 1: ODH Ebola and Other Special Pathogens Clinical Conference Call Algorithm. Topics in this conference call are listed in the algorithm. All Frontline Hospitals should be ready to present and answer questions based on these topics.

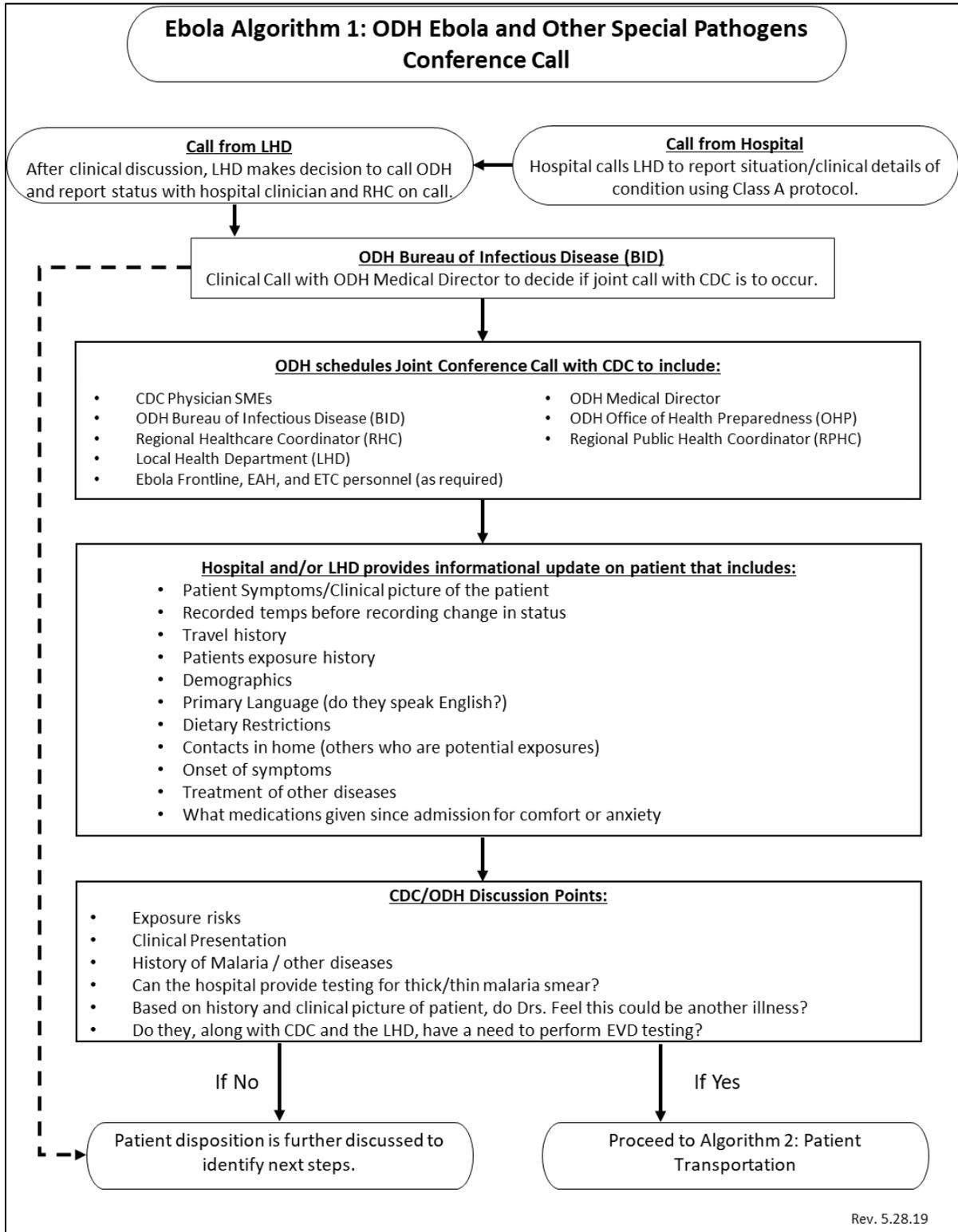
If the clinical group decides there is no risk of EVD, the algorithm ends, and patient care continues at the receiving hospital.

If the clinical group determines the suspect patient meets the criteria of a PUI and the patient needs to be transported, the RHC and/or RHPC will initiate Algorithm 2: Patient Transportation.

If the patient is first encountered by EMS, see the considerations in the “EMS Protocol for Bypassing a Frontline Healthcare Facility” in Appendix 4.

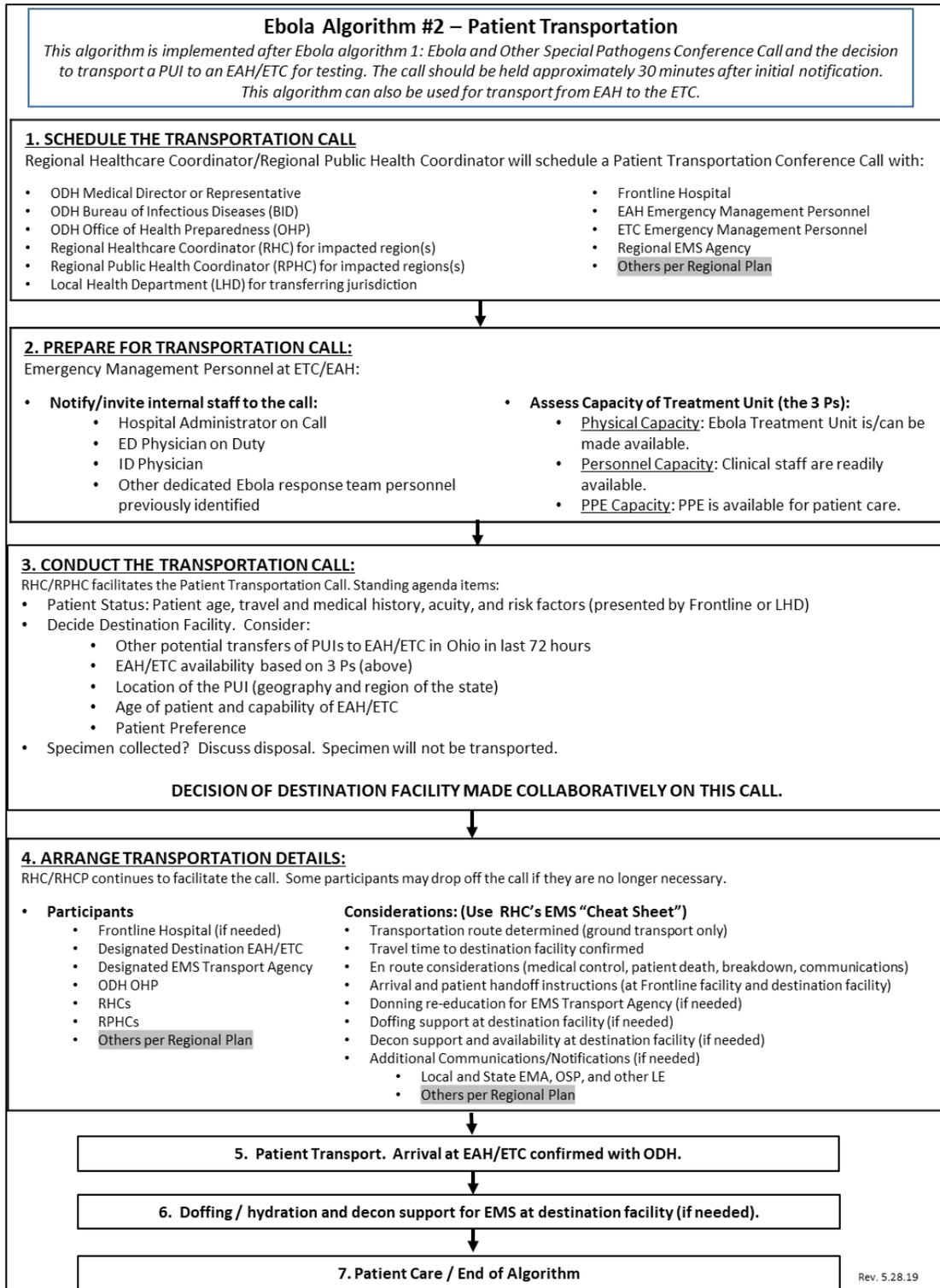
Algorithm 2: Patient Transportation will be scheduled directly following or shortly after Algorithm 1. The purpose of this call is to finalize the logistics for transporting the patient to an EAH or the ETC.

A. Ebola Algorithm 1: ODH Ebola and Other Special Pathogens Clinical Conference Call Algorithm.



B. Ebola Algorithm 2: Patient Transportation

This algorithm has been drafted, tested, and approved by the OEPC as guidance for coordinating patient transportation. This guidance can be modified to fit regional plans (see shaded areas).



Appendix 2: Public Health Active Monitoring and Investigation of a Confirmed Case

***NOTE:** In 2014, the CDC monitoring process was put in place for all returning travelers to impacted countries. These processes may not be implemented in future outbreaks. In 2019, only Healthcare Workers (HCW) that return from work in an Ebola-Affected country are being monitored (see A. Ohio Protocol for Monitoring Healthcare Workers HCW) Returning from Ebola-Affected Countries below).

Background

In mid-October 2014, the Centers for Disease Control and Prevention (CDC) notified states of persons arriving to the U.S. from Ebola-affected countries.

Persons that returned to the US or visited the US (referred to as “travelers”) from countries with widespread transmission or countries with former widespread transmission and current, established control measures within 90 days of being declared Ebola free, or countries with cases in urban settings with uncertain control measures (none at this time) were screened for Ebola exposures and symptoms by CDC and Customs and Border Protection agents at identified U.S. airports. Symptomatic travelers did not continue their travel until EVD was ruled out. Asymptomatic travelers were provided a CARE (Check and Report Ebola) kit, which included a thermometer, Ebola educational materials, and a cell phone as part of the [CARE kits](#) with at least 21 days of unlimited talk and text service to make sure the traveler and the LHD should stay in contact.

Thorough case investigation, contact tracing, and public health monitoring of identified community members and health care workers were to understanding and preventing further transmission of EVD.

National Guidance:

1. For current national guidance, visit the [CDC’s Ebola website](#).
2. For more about the CDC response to the 2014 outbreak, see the [MMWR Supplement: CDC’s Response to the 2014–2016 Ebola Epidemic — West Africa and United States](#) (July 8, 2016).

Ohio Guidance:

A. Ohio Protocol for Monitoring Healthcare Workers (HCWs) Returning from Ebola-Affected Countries

ODH Ohio created a protocol for daily self-monitoring of returning HCWs based on CDC’s guidance. In 2019, only HCWs returning from Ebola-affected countries are being monitored. CDC and the Non-Governmental Organization (NGO) that sponsored the HCW notify ODH of the identities of returning HCWs. ODH shares the information with the LHD where the HCW will be staying. ODH sends a letter to the NGO with a temperature and symptom monitoring form to ensure early recognition and reporting of possible Ebola virus disease. The NGO then sends the welcome letter and monitoring form to their returning HCW. The HCW self-monitors, taking their own temperature and recording symptoms twice daily. After each temperature reading, the HCW sends an email to the NGO, ODH and the LHD.

This system allows LHDs to maintain local situational awareness, as well as, enables a rapid response by establishing a connection between travelers and their LHD which facilitates communication if a HCW becomes symptomatic.

LHD Protocols Consisted of:

1. Welcome Traveler
2. Review Risk
3. Discuss Actions to Take if a Traveler Develops Symptoms
4. Partner / Media Communications
5. If the traveler or PUI contacts public safety (police, fire, or EMS) or a HCW LHD regarding possible EVD symptoms, the traveler or PUI, must notify the public safety personnel or HCWs of their Ebola monitoring status.

B. Ohio Protocol for Investigating a Confirmed Case of Ebola or a Person Under Investigation (PUI)

If a HCW becomes symptomatic, a conference call will be held with CDC and the NGO. If the HCW needs further medical evaluation, ODH will convene a call with the LHD, receiving hospital and CDC to discuss next steps. If a laboratory-confirmed case of Ebola is diagnosed, the LHDs, with assistance from ODH, will identify and monitor close contacts. Contact monitoring allows for local situational awareness and connects contacts with LHD staff, which facilitates a rapid response if a contact becomes symptomatic. Once identified, contacts will be monitored according to protocol. Assessment and monitoring of HCW contacts will be conducted by of the LHD and ODH.

CDC will be notified if a PUI is identified. The ODH Department Operations Center will be activated if a confirmed case is identified in Ohio. ODH will be responsible for communications with CDC and integration of CDC into the response.

Protocol Consists of:

1. Identification of a Person Under Investigation
2. Patient Interview
3. Contact Tracing in the Community
4. Assessing Risk to Potential Community Contacts and Monitoring
5. Health Care Worker Assessment and Monitoring
6. Partner / Media Communications

Appendix 3: Isolation and Quarantine

Isolation and quarantine will help protect the public by preventing exposure to people who have or may have a contagious disease.

1. **Isolation** separates sick people with a contagious disease from people who are not sick.
2. **Quarantine** separates and restricts the movement of people who were exposed to a contagious disease to see if they become sick.

At this time, CDC does not recommend quarantine for individuals exposed to EVD. Isolation for symptomatic individuals will take place in a hospital setting, most likely an EAH or, if confirmed, an ETC.

National Guidance:

1. [Isolation and Quarantine](#)
2. [Cleaning and Decontamination of Ebola on Surfaces](#)
3. [Interim Guidance for Dog or Cat Quarantine after Exposure to a Human with Confirmed Ebola Virus Disease](#)

Ohio Guidance:

No Ohio-specific guidance for this topic.

Appendix 4: Transport of PUI or Confirmed Ebola Patient

Depending on where a PUIs seeks care, he or she may need transportation to an EAH for evaluation and a patient with confirmed Ebola may need to be transported to an ETC for treatment, management, and care. Coordination is needed to facilitate patient transfers to a designated EAH or ETC.

The CDC has developed guidance for EMS providers that includes patient assessment, safety and PPE, patient management, transport, and decontamination and is working on guidance about interfacility transport. Guidance at the local level may vary based on local resources and mores. The local EMS agency director will provide guidance to 9-1-1 Public Safety Answering Points (PSAPs) about protocols for identifying calls related to people at risk for contracting Ebola. The OEPC recommends that dispatch centers ask travel questions only if or when there is an identified situation that indicates Ebola or other special pathogens.

Transportation should be considered for the following situations:

1. From a home or other location where a PUI might be self-monitoring for symptoms to an assessment hospital or treatment center.
2. From a medical provider's office to an assessment hospital or treatment center.
3. From a scene or Frontline Hospital in an EMS vehicle to an EAH or ETC.
4. From Ohio's ETC to an airport in accordance with the [HHS Region V: Ebola Virus Disease Coordination and Transportation Plan](#).
5. From an airport that has agreed to receive a PUI or patient confirmed with Ebola transported by air medevac to a treatment center.

National Guidance:

1. [Guidance for Developing a Plan for Interfacility Transport of Persons Under Investigation or Confirmed Patients with Ebola Virus Disease in the United States](#)
2. [Guidance on Air Medical Transport \(AMT\) for Patients with Ebola Virus Disease \(EVD\)](#)
3. [HHS Region V: Ebola Virus Disease Coordination and Transportation Plan](#)

Ohio Guidance:

A. Guidance for EMS Agencies and Patient Transportation from the OEPC.

Purpose: Provide guidance to protect the health and safety of EMS and medical first responders while providing appropriate medical treatment for patients with suspected or confirmed Ebola including transport to an appropriate medical facility for Ebola assessment and medical treatment.

Goal: To develop a guidelines for EMS in Ohio to respond to a PUI/confirmed Ebola patient during a(n):

1. 9-1-1 request for service with signs or symptoms of Ebola
2. LHD request for PUI/confirmed Ebola patient transport
3. Interfacility transport request for PUI/confirmed Ebola patient
4. EMS Ebola Communication Plan and Algorithm
5. HCW or PUI calls 911
6. HCW or PUI calls LHD
7. HCW or PUI calls a specific facility

The following list contains guidelines and items to consider when transporting a patient with confirmed or suspected Ebola.

1. Medical control during the transportation of an Ebola patient will remain with the medical director of the transporting EMS agency.
2. Physicians from the ETC or the EAH should be available for consult during transport, but ultimate decisions making authority lies with the EMS agency's medical director.
3. Ohio EMS has adopted the CDC's guidelines for a 'chase car' while transporting a patient. In some regions this 'chase car' will consist of another ambulance.
4. If a transport vehicle breaks down, the EMS crew should call the destination facility for assistance. If the destination facility cannot assist, the EMS crew can contact the ODH 24/7 number (614-722-7221) to notify EMS transport agencies that are approved to transport patients when traveling through the area. The local jurisdiction where the breakdown occurs must also be notified, including police, fire, EMS, and Haz-Mat. Procedures for the breakdown of an EMS vehicle will be discussed during the Patient Transportation call.
5. In the event of a patient death during transport, the EMS crew will follow normal protocols and procedures for a death during transport; unless they are closer to their originating location. In that situation, the EMS crew will turn back to minimize the time the crew spends with the infectious body.
6. EMS – Recommend that driver not be in PPE (safety issue) although some may still prefer to wear PPE.
7. Notify the Ohio State Patrol (OSP) when transporting across regions as an FYI.

The medical director for an EMS organization remains the primary authority during the transport of a patient with a highly infectious disease between a designated assessment hospital and a designated treatment hospital.

B. EMS Protocol for Bypassing Frontline Healthcare Facilities: Directed Transport to Ebola Assessment Hospitals/Ebola Treatment Center (from West Central Region and Dayton MMRS)

In selected cases, bypassing frontline hospitals to transport a PUI to an EAH or ETC may be appropriate. There are two circumstances in which such bypass transports might be considered:

1. A Person Under Investigation who is a "dry" patient with minimal symptoms (e.g., low grade fever).
2. Patients whose history and severity of symptoms would categorize the patient as being a high risk for a viral hemorrhagic fever (VHF) when a suitably equipped and prepared transport unit is available for rapid scene response.

Considerations that may impact decision to bypass one or more frontline hospitals:

1. Geographic distance and transport time
2. Availability of adequate PPE for the transport crew
3. A chase vehicle is required
4. The EAH or ETC must be consulted and consent
5. The agency must consent, especially for transports of significant distance

This protocol is comparable to many other situations where EMS bypasses closer hospitals to go to specialty centers (e.g., patients with burns, major trauma, ST-elevation myocardial infarction, active labor with imminent delivery, stroke, and others). It is intended to prevent contamination at Frontline

Hospitals and deliver the patient to a facility that is equipped to test or treat the patient. Use of this protocol would be applicable when there is some reason to believe that VHFs are of concern, and is consistent with [CDC Guidance](#) which states “therefore, patients at high risk for EVD should be referred primarily to Ebola assessment hospitals (or treatment centers) rather than frontline hospitals.”

Each EMS agency will follow its own medical direction. Consider that High Risk Patients for purposes of this protocol would have all of the following:

1. Fever
2. Hypotension
3. Otherwise unexplained hemorrhage (bleeding or bruising), and
4. History of travel to a location with a known outbreak of a EVD; or history of known contact with an EVD patient, within the last three weeks.

EMS Actions to Take

EMS encountering such patients should consider the following steps (based on their agency’s medical direction):

1. Immediately don the highest available level of PPE, including protection against, contact, droplet, and airborne infectious diseases.
2. Use caution when approaching the patient. On rare occasions, VHF can cause delirium, with erratic behavior that can place EMS providers at additional risk of exposure.
3. Have any suspected VHF patient don a mask (surgical or O2).
4. Minimize contact with the patient.
5. Provide only essential life support care.
6. Request the nearest Special Transport Unit (STU) respond.
7. Keep your hands away from your face.
8. Perform invasive procedures (e.g., starting IVs) on suspected EVD patients **only** if necessary, and **never** in a moving vehicle.
 - A. Limit use of sharps as much as possible.
 - B. Avoid aerosol-generating procedures (AGPs). If AGPs are necessary, perform them after the unit pulls to a safe location and stops, and after donning full PPE including an N95 or P100 respirator or PAPRs.
 - C. When AGPs are critical due to the patient’s condition, use procedures that generate the least aerosols or that do not require close facial contact by the provider, or techniques selected according to the crew’s best judgment.
 - D. If conducted, perform these procedures under the safest available circumstances (e.g., in a stopped vehicle, at the scene, or at the destination hospital, and in the highest available levels of PPE).
 - E. In an end-stage suspected VHF patient (multiple hemorrhage sites or huge fluid losses from hemorrhage, vomiting, or diarrhea), resuscitation from cardiac arrest is likely to be futile. Contact a medical control physician (MCP) for consideration of field termination if cardiac arrest occurs.
9. Give vomiting patients large red biohazard bags to contain the emesis. Do not use emesis pans.

10. Contact Medical Control to discuss whether transport should be to a Frontline Hospital or directly to an EAH or ETC.
11. **Ensure that the receiving facility is notified as early as possible!**
12. If transporting outside your region, it is recommended that you advise the Ohio State Highway Patrol.
13. Fully document all EMS personnel involved at the scene and in transit.

The Regional Healthcare Coordinator and Regional Public Health Emergency Preparedness Coordinator in each region of the state have copies of Special Pathogens Communication Sheet that provide communications information for every EAH in the state, as well as the ETC.

Additional References/Best Practices:

- A. Annex A to WEST CENTRAL OHIO EMERGING INFECTIOUS DISEASE EBOLA/SPECIAL PATHOGEN PLAN, Regional Collaborative Special Transport Unit (STU) – refer to OPHCS for this document.

Appendix 5: Ohio’s Tiered Strategy for Ebola Facilities and Services

The CDC’s [Interim Guidance for U.S. Hospital Preparedness for Patients Under Investigation \(PUIs\) or with Confirmed Ebola Virus Disease \(EVD\): A Framework for a Tiered Approach](#) provides the state with the flexibility for hospitals and health care facilities to designate level of care based on volume and risk level of patient.

This system would ensure the capabilities and resources are available to provide the appropriate level of care to a suspected or confirmed Ebola patient.

A. Frontline Healthcare Facility (FHF)

Frontline Healthcare Facility– Hospitals that can rapidly identify and triage patients with relevant exposure history AND signs and symptoms compatible with EVD. Frontline Healthcare facilities are not expected to test or treat patients with EVD.

FHF Role in Response:

1. Process to identify, triage and isolate a suspected EVD patient utilizing CDC Emergency Department Evaluation and Management for Patients Who Present with Possible EVD.
2. Process to notify public health of suspected cases of EVD.
3. Isolation space to accommodate patients until transfer to a higher level of care can be completed.
4. Process to identify multidisciplinary team(s) to include clinical and nonclinical staff to ensure all members are trained to care for patient(s) and competent in donning and doffing protective equipment.
5. Process to transfer a suspected EVD patient to a higher level of care, includes EMS plans.
6. Identified dedicated EMS units to transport patient.
7. Process to determine PPE levels/type using a standardized approach following CDC guidelines.
8. Process to conduct training to maintain proficiency in isolation and PPE techniques appropriate to level of care.

*NOTE: A Frontline Healthcare Facility is not responsible for conducting rule out labs or EVD testing.

B. Ebola Assessment Hospitals (EAH)

EAHs are prepared to receive and isolate patients with possible EVD and care for a patient until an Ebola diagnosis can be confirmed or ruled out and until discharge or transfer is complete.

Ebola Assessment Hospital	Location
The Christ Hospital	Cincinnati
Cincinnati Children’s Hospital Medical Center	Cincinnati
Good Samaritan Hospital	Cincinnati
Nationwide Children’s	Columbus
Ohio State University Wexner Medical Center	Columbus
St. Rita’s Medical Center	Lima
University of Cincinnati Medical Center	Cincinnati

1. Verification of EAH: Ohio's EAH hospitals have been assessed by the CDC and ODH against CDC recommended capabilities to fulfill the EAH role.
2. EAH Role in Planning: The EAH is a part of the OEPC. They are also responsible to update and exercise facility-specific plans for Ebola response.
3. EAH Role in Response: During an EVD response, the EAH:
 - i. Prepares to receive and isolate a PUI for EVD and care for the patient until an Ebola diagnosis can be ruled out or confirmed and until discharge or transfer is completed.
 1. Ensures processes are in place to accept patients transferred from another facility or referred by public health.
 - ii. Ensures that anyone with symptoms and travel history consistent with EVD can be cared for until an Ebola diagnosis is confirmed or ruled out.
 1. Ensures a process in place to run appropriate labs (point-of-care sites or clinical labs agreeing to run tests).
 2. Ensures a process to collaborate with public health for submission of specimens for testing for Ebola at the Ohio Department of Health Laboratory.
 - iii. Ensures a process to notify public health of suspected or confirmed cases of Ebola.
 1. EAHs should be able to provide up to 96 hours of evaluation and care for PUIs until the diagnosis is either confirmed or ruled out and until discharge or transfer is completed.
 2. Process to identify dedicated isolation space to accommodate one to three (1-3) patients for up to 96 hours.
 3. Process that ensures access to Infectious Disease physician(s).
 4. Process to identify multidisciplinary team(s) to include clinical and nonclinical staff to ensure all members are trained to care for patient(s) and competent in donning and doffing protective equipment.
 5. Process to determine PPE levels/type using a standardized approach following CDC guidelines.
 6. Process to conduct training to maintain proficiency in isolation and PPE techniques appropriate to level of care.
 7. Worker safety programs and policies that are in compliance with federal and state OSHA standards. Program include process for direct active monitoring through public health of all healthcare workers involved in direct patient care for 21 days post last exposure.
 8. Secured the services of a waste management vendor capable of managing and transporting Category A infectious substances.
 - iv. Prepares to transport patients with confirmed EVD to an ETC. Transfer decisions should be informed by discussions among public health authorities and referring and accepting physicians on a case-by-case basis, depending on the status of the patient and the capacity of the EAH.
 1. Process to transfer confirmed EVD patients to a higher level of care, including EMS plans.
 2. Identified dedicated EMS units to transport EVD patients.

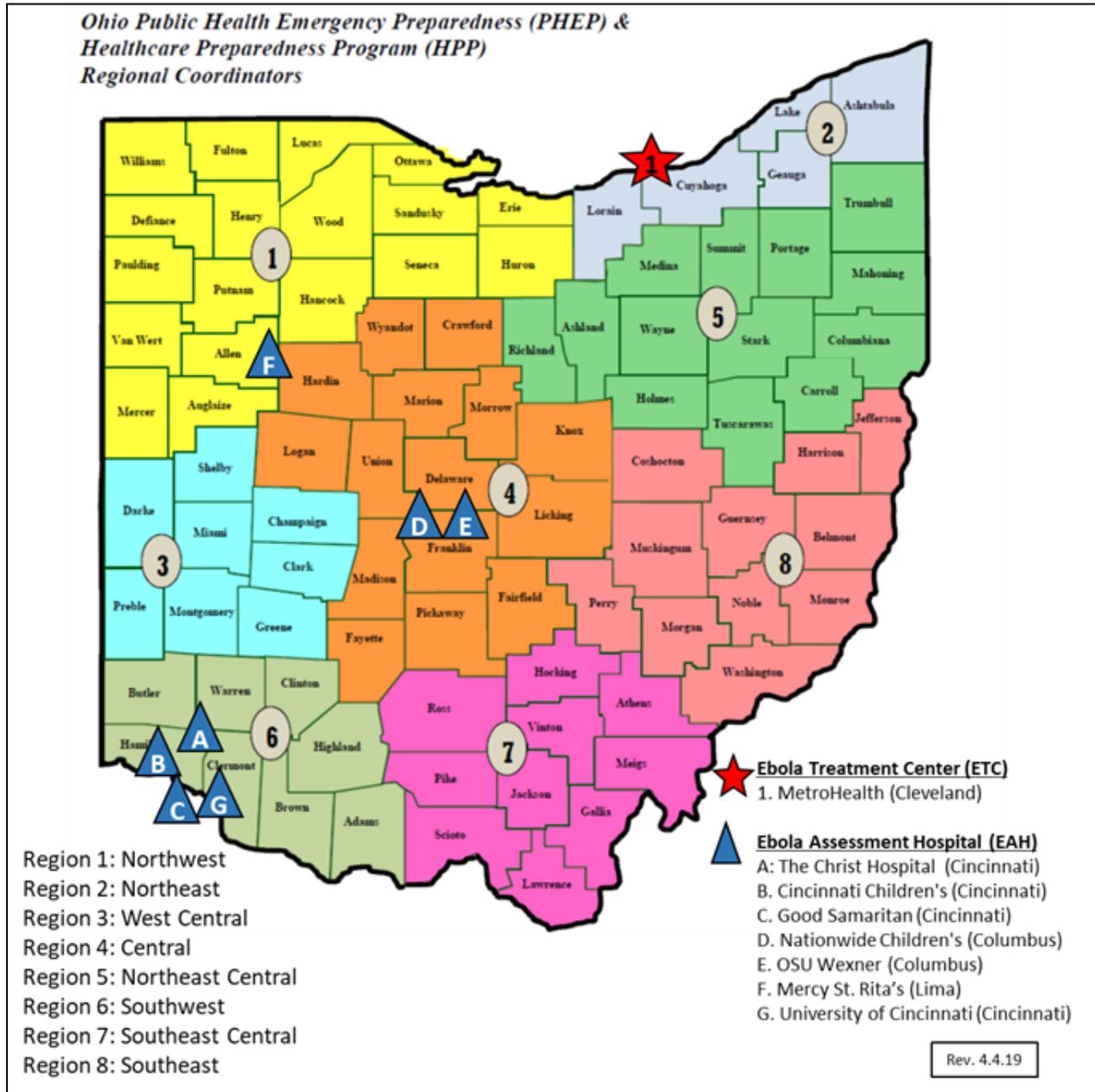
C. Ebola Treatment Center (ETC)

MetroHealth Medical Center is the designated ETC in Ohio. Ohio's ETC is prepared to provide comprehensive care to persons diagnosed with EVD for the duration of a patient's illness.

Ebola Treatment Center	Location
MetroHealth	Cleveland

1. Verification of the ETC: MetroHealth has been assessed by the CDC and the Ohio Department of Health against capabilities to fulfill the ETC role.
2. The ETC Role in Planning: The ETC is a part of the OEPC and serves as the chair of the Patient Care Committee.
3. The ETC Role in Response:
 - i. A process to notify public health authorities of suspected or confirmed EVD patients.
 - ii. A process to provide comprehensive care to confirmed EVD patients for the duration of their illness.
 - iii. Isolation and treatment capacity to provide care to no more than two (2) confirmed EVD patients.
 - iv. Procedures to manage laboratory-confirmed Ebola patients.
 - v. A process in place to run appropriate labs (point-of-care sites or clinical lab)
 - vi. A process to conduct training to maintain proficiency in isolation and PPE techniques appropriate to level of care
 - vii. Worker safety programs and policies that comply with federal and state Occupational Safety and Health Administration (OSHA) standards. The program include process for direct active monitoring through public health of all healthcare workers involved in direct patient care for 21 days post last exposure.
 - viii. Secured the services of a waste management vendor capable of managing and transporting Category A infectious substances.
 - ix. Process to identify dedicated EMS units to transport EVD patients to and from the ETC and to the HHS Region V RETC in Minnesota.

A. Map of Ohio Ebola Assessment Hospitals and Treatment Center



B. Preparing US Hospitals for Ebola

Preparing U.S. Hospitals for Ebola



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

CDC has developed a strategy to help healthcare facilities and state health officials prepare for patients with possible or confirmed Ebola. This strategy identifies which hospitals will provide different levels of care for patients being assessed and treated for Ebola.



Frontline Healthcare Facility

- 

Quickly identifies and isolates patients with possible Ebola
- 

Notifies facility infection control and state and local public health officials
- 

Has enough Ebola personal protective equipment (PPE) for at least 12–24 hours of care

Prepares for patient transfer, if needed 



Ebola Assessment Hospital

- 

Safely receives and isolates a patient with possible Ebola
- 

Provides immediate laboratory evaluation and coordinates Ebola testing
- 

Cares for a patient for up to 96 hours (including evaluation and management of alternative diagnoses) until Ebola diagnosis is confirmed or ruled out
- 

Has enough Ebola PPE for up to 96 hours of care

Transfers a patient with confirmed Ebola to an Ebola treatment center in consultation with public health officials 



Ebola Treatment Center

- 

Safely receives and isolates a patient with confirmed Ebola
- 

Cares for patients with Ebola for duration of illness
- 

Has enough Ebola PPE for at least 7 days of care (will restock as needed)
- 

Has sustainable staffing plan to manage several weeks of care
- 

CDC experts are ready to deploy to provide assistance as needed

All of the hospitals will be prepared to do the following:



Ensure staff are appropriately trained and have documented competency in safe PPE practices



Have systems in place to safely manage waste disposal, cleaning and disinfection



Adhere to infection control protocols

In some cases, a hospital should be prepared to serve in more than one role. Hospitals may serve simultaneously as an Ebola assessment hospital and an Ebola treatment center. Patients may be transferred between facilities based on the state's plan.

*View Interim Guidance at: <http://www.cdc.gov/vhf/ebola/healthcare-us/preparing/hospitals.html> CS20E337A September 11, 2018 2:41 AM

<https://www.cdc.gov/vhf/ebola/pdf/preparing-hospitals-ebola-P.pdf> (rev. Sept 11, 2018)

C. Frontline Healthcare Facility Job Aid

All Frontline Healthcare Facilities (FHF) and especially all Emergency Departments (EDs), are expected to be able to ‘Identify, Isolate, Inform,’ and coordinate with local and state health authorities. See the [CDC Algorithm](#) “Identify, Isolate, Inform: Emergency Department Evaluation and Management of Patients Under Investigation for Ebola Virus Disease.” This job aid is intended for use by FHF when a patient presents unexpectedly with a history or clinical presentation that suggests Ebola or other viral hemorrhagic fever.

1. Identify exposure history and signs and symptoms

Patient presents with positive responses to both screening questions, or ED is notified of impending arrival:

- Lived or traveled outside US to a country with widespread Ebola transmission or had contact with an individual with confirmed Ebola in the previous 21 days?
AND
- Fever greater than 100.4 degrees (38 C) **OR** Ebola-compatible symptoms (headache, weakness, muscle pain, vomiting, diarrhea, abdominal pain, or hemorrhage)

2. Isolate the patient and determine PPE needed

Give patient a mask and isolate the patient in a private room or separate enclosed area with private bathroom or covered, bedside commode. Adhere to Contact Precautions and procedures designed to prevent transmission by direct or indirect contact (dedicated equipment, hand hygiene, and restricted patient movement). To minimize transmission risk, only essential healthcare workers with designated roles should provide patient care. All healthcare workers who have contact with the patient should put on appropriate PPE based on CDC guidance and the patient’s clinical status. See CDC guidance for [“wet” patients](#) and CDC guidance for [“dry” patients](#).

3. Inform appropriate personnel

Each FHF should plan to contact the key positions listed below. Notifications for each FHF can be customized for their facility plan and their Regional Plan. To learn about the Regional Plan, contact your Regional Healthcare Coordinator (RHC).

NOTIFICATIONS

Notified	Role	Contact Number
	Infection Control Program	
	Infectious Disease Specialist (if available)	
	Administrative Officer on Duty	
	Local Health Department 24/7 Contact	
	Regional Healthcare Coordinator (RHC)	

Initial Patient Assessment Worksheet

Once a person has been identified as a possible person under investigation (PUI), the facility should contact the LHD via the 24/7 telephone number. The FHF should be prepared to present the following information to the LHD. This information will also be relayed to ODH in a conference call ([see Ebola Algorithm 1](#)).

Collect and provide the following information to the LHD:							
Contact Information:							
Facility Name							
Name of reporting Healthcare Provider							
Contact Information							
Patient Information:							
Patient Name				Date of Birth			
Patient Address							
Age		Sex		Race/Ethnicity			
Travel History (location and dates of travel)							
Patient's Clinical Status (symptoms, onset, vital signs, fever, blood pressure, pulse, etc.)							
Malaria							
Prophylaxis Prescribed: Yes/No		Medication		Dose		Schedule	
Notes on Adherence to Malaria Prophylaxis:							
Supplemental Information to Identify Prodrome (if available/if PUI is actively monitored by LHD)							
Recorded temperature and symptoms since monitoring began							
Mark day of symptom onsets with *	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
	/	/	/	/	/	/	/
	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14
	/	/	/	/	/	/	/
	Day 15	Day 16	Day 17	Day 18	Day 19	Day 20	Day 21

EBOLA ALGORITHM 1: ODH Ebola and Other Special Pathogens Clinical Conference Call Algorithm

If the LHD and FHF agree the patient is a PUI, the LHD will notify ODH to activate Ebola Algorithm 1. During this call, a decision will be made regarding transportation of the patient to an EAH or ETC for assessment. If the PUI is to be transported, [Ebola Algorithm 2: Patient Transportation](#) is activated according to regional protocol.

Conference Call Information: (Please give 30-60 minutes for Local Health Department to contact Ohio Department of Health and set up conference call)	
Host:	
Date:	Time:
Conference Call Phone Number:	PIN:
DECISION: Transport Patient YES / NO	
If yes, activate Ebola Algorithm 2.	
Organization assigned to send notification (per Regional Plan):	

EBOLA ALGORITHM 2: Patient Transportation

When the decision has been made to transport a PUI from a FHF to an EAH or ETC, Ebola Algorithm 2 is activated to arrange the specific details for patient transport. After this call, a destination facility, EMS agency, and specific en route protocols will be determined and confirmed. The patient will be transported to an EAH or ETC.

Appendix 6: Guidance for Patient Care in a Hospital Setting

All healthcare facilities should, in coordination with local and state health authorities, be able to:

1. Rapidly identify and triage [patients with relevant exposure history AND signs or symptoms](#) compatible with EVD as outlined in CDC's guidance. See [CDC FAQs](#) on Ebola Virus Disease.
2. Immediately isolate any patient with relevant exposure history and signs or symptoms compatible with EVD and take appropriate steps to adequately protect staff caring for the patient, including appropriate use of personal protective equipment (PPE). If the patient has vomiting or bleeding follow the PPE [guidance for confirmed Ebola patients or PUIs](#). If the patient is clinically stable, and is not vomiting or bleeding, follow the PPE [guidance for clinically stable persons under investigation for Ebola](#).
3. Immediately notify the hospital/facility infection control program, other appropriate facility staff, and the state and local public health agencies that a patient has been identified who has relevant exposure AND signs or symptoms compatible with EVD; discuss level of risk, clinical and epidemiologic factors, alternative diagnoses, plan for EVD testing, and plan for possible patient transfer to another facility and further care.
4. Frontline healthcare facilities should consider, in coordination with state and local health authorities and according to the state's plan, transferring the patient to an EAH that can provide Ebola testing and care until an Ebola diagnosis is either confirmed or ruled out. Patients who are deemed to have low likelihood of EVD based on clinical and epidemiologic factors and who have mild illness, but who nonetheless require Ebola virus testing, may, in some circumstances, remain at the frontline healthcare facility while testing is conducted.
5. Patients with confirmed EVD should be transferred to an ETC.

National Guidance:

1. [Interim Guidance for Preparing Frontline Healthcare Facilities for Patients Under Investigation \(PUIs\) for Ebola Virus Disease \(EVD\)](#)
2. [Interim Infection Prevention and Control Guidance for Care of Patients with Suspected or Confirmed Filovirus Hemorrhagic Fever in Health-Care Settings, with Focus on Ebola](#)

Ohio Guidance

No Ohio-specific guidance for this topic.

Appendix 7: Infection Control

National Guidance:

CDC recommends a combination of measures to prevent transmission of EVD in hospitals including PPE. These should be implemented in addition to routine IPC practices that are implemented daily to prevent transmission of infectious diseases from patient to patient and patient to healthcare personnel.

Healthcare personnel might need to take additional infection control steps if a PUI or patient with confirmed EVD has other conditions or illnesses caused by specific infectious diseases, such as tuberculosis.

Healthcare personnel can be exposed to Ebola virus by touching a patient's body fluids, contaminated medical supplies and equipment, or contaminated environmental surfaces. Splashes to unprotected mucous membranes (for example, the eyes, nose, or mouth) are particularly hazardous. Procedures that can increase environmental contamination with infectious material or create aerosols should be minimized.

1. [Infection Prevention and Control Recommendations for Hospitalized PUIs for EVD in U.S. Hospitals](#)

Ohio Guidance:

1. ODH guidance follows the most current [CDC Guidelines for Ebola](#).
2. Use of [Bioquell](#) for infection control.

Appendix 8: Laboratory

National Guidance:

Due to a heightened concern in the United States about Ebola, the CDC provides guidance for clinical laboratories on testing needed for the assessment and care of patients for whom EVD is a concern, while minimizing risk to laboratory personnel. The guidance is based on input received from numerous hospital and laboratory directors, infectious disease physicians, CDC Ebola response teams, and state health officials.

Key Points:

1. CDC recommends that Ebola testing be conducted only for persons who meet the [criteria for persons under investigation \(PUIs\) for EVD](#)
2. Presumptive testing for Ebola virus is available at over 60 [LRN laboratories](#) located throughout the United States. Hospitals should follow their state and/or local health department procedures for notifying and consulting about Ebola virus testing requests before contacting CDC.
3. Any presumptive positive Ebola test result must be confirmed at the CDC to inform public health decisions. For guidance on confirmatory Ebola virus testing, refer to [Guidance for Collection, Transport and Submission of Specimens for Ebola Virus Testing in the United States](#).
4. If a hospital chooses to use a commercial Ebola virus test, specimens should also be submitted to an LRN facility or CDC for definitive Ebola virus testing.
5. To minimize risk to personnel, a risk assessment must be performed by the laboratory director, safety officer, and other responsible persons to determine the potential for exposure from sprays, splashes, or aerosols generated during all laboratory processes, procedures, and activities. Risks should be mitigated by implementing engineering controls, administrative and work practice controls, and use of appropriate personal protective equipment (PPE).
6. To date, CDC considers the risk of acquiring EVD or other viral hemorrhagic diseases through laboratory testing to be low, but not zero risk. Some recommended measures to minimize the risk of laboratory transmission when testing patient specimens include: limiting the number of staff engaged in testing, evaluating and segregating equipment used for testing, and performing testing in a dedicated space. See [CDC's Ebola Website](#) for current information.
7. The decision to perform testing in a hospital care laboratory using existing instrumentation, or alternatively, acquiring dedicated point-of-care (POC) instrumentation should be carefully evaluated. Considerations may include whether Ebola patient testing may lead to core laboratory instrumentation being removed from service, and the planning should include how to mitigate such potential outcomes.
8. The United States Occupational Safety and Health Administration (OSHA) [Bloodborne Pathogens Standard \(29 CFR 1910.1030\)](#) was developed to reduce the potential exposure of personnel to blood borne pathogens. All U.S. laboratories handling patient specimens are required to comply with this standard at all times; strict adherence is an initial step in providing protection to personnel.
9. U.S. hospitals or clinical laboratories concerned about a patient with potential Ebola virus exposure should contact their local and/or state health departments and CDC (770-488-7100).

References

1. [Guidance for U.S. Laboratories for Managing and Testing Routine Clinical Specimens When There is a Concern about Ebola Virus Disease](#)

Ohio Guidance:

ODH Laboratory will test specimens for EVD at no charge to the submitter. Prior approval of the CDC and the ODH Bureau of Infectious Diseases (BID) is required and occurs on the first conference call with the EAH. Guidance on sample collection, packaging and shipping is available in the [ODH laboratory Microbiology Client Services Manual](#).

Appendix 9: Waste Management Considerations

National Guidance

Waste generated in the care of PUIs or patients with confirmed EVD is subject to procedures set forth by local, state, and federal regulations. Basic principles for spills of blood and other potentially infectious materials are outlined in the U.S. Occupational Safety and Health Administration (OSHA) [Bloodborne Pathogens Standard \(29 CFR 1910.1030\)](#).

Waste contaminated (or suspected to be contaminated) with Ebola virus is a Category A infectious substance regulated as a hazardous material under the U.S. Department of Transportation (DOT) ([49 CFR, Parts 171-180](#)). Requirements in the HMR apply to any material the DOT determines is capable of posing an unreasonable risk to health, safety, and property when transported in commerce. A partial list of other Category A infectious substances is presented below.

In January, 2017, a multidisciplinary committee of the US Department of Transportation, the US Environmental Protection Agency, the US Department of Labor, the Centers for Disease Control and Prevention, and ASPR presented the [Interim - Planning Guidance for the Handling of Solid Waste Contaminated with a Category A Infectious Substance](#). Use these recommendations to: 1) identify handling considerations for contaminated waste for your locality; 2) develop a contaminated waste protocol or evaluate an existing protocol; 3) guide protection of worker health and safety; and 4) support the development of Category A waste management and response plans for contaminated and inactivated waste materials. This guidance does not address wastewater streams or provide instruction on decontamination measures, nor does it remove the obligation to comply with all applicable Federal, State, and local laws and regulations.. Wastewater treatment is regulated by the Environmental Protection Agency and State agencies and is outside the scope of this document. This document is also not intended to describe environmental cleaning and decontamination.

Ebola-associated waste that has been appropriately incinerated, autoclaved, or otherwise inactivated is not infectious, does not pose a health risk, and is not considered to be regulated medical waste or a hazardous material under federal law. Therefore, such waste no longer is considered a Category A infectious substance and is not subject to the requirements of the HMR. Inactivation or incineration of Ebola-associated waste within a hospital system may be subject to state, local, and OSHA regulations. See below for Ohio regulations.

On-site inactivation

1. Ebola-associated waste may be inactivated through the use of appropriate autoclaves. Other methods of inactivation (e.g., chemical inactivation) have not been standardized and would need to consider worker safety issues, as well as the potential for triggering other federal safety regulations.

On-site incineration

1. Ebola-associated waste may be incinerated. The products of incineration (i.e., the ash) can be transported and disposed of in accordance with state and local regulations and standard protocols for hospital waste disposal.
2. Ebola-associated waste disposal is subject to [state and local regulations](#). See below for Ohio regulations. Ebola-associated waste that has been appropriately inactivated or incinerated is not

infectious and is not considered to be regulated medical waste or a hazardous material under federal law.

When the site generating the medical waste does not have the capability to appropriately incinerate, autoclave, or otherwise inactivate the medical waste, a special permit in accordance with DOT-SP 16279 is necessary to transport the waste. Guidance on the handling, decontamination, and removal of contaminated waste found in the non-healthcare setting can be found [here](#).

Ohio Guidance:

ODH follows CDC guidance for decontamination and removal of EVD contaminated waste including: medical equipment, sharps, linens, and used health care products (such as soiled absorbent pads or dressings, kidney-shaped emesis pans, portable toilets, used PPE [e.g. gowns, masks, gloves, goggles, face shields, respirators, booties) or byproducts of cleaning contaminated or suspected of being contaminated with a Category-A infectious substance.

Ohio facilities that are unable to treat waste on-site need to work with the Ohio Environmental Protection Agency (OEPA) to develop a waste management plan for handling, packaging, and disposition of Category-A associated waste.

For Ohio facilities that can treat Category-A associated waste on-site, treated waste is no longer considered infectious waste and can be disposed of according to state and local regulations regarding solid waste. Other information related to Category-A Hazardous Waste disposal include:

1. Legal and regulatory requirements related to the handling, packaging, transportation, and disposal of Category-A Hazardous Waste.
2. Capabilities available in the jurisdiction to assist healthcare facilities in arranging for vendors to remove Category-A Hazardous Waste.
3. Measures taken to ensure waste removed from locations in the community where patients with confirmed Ebola lived and is handled and disposed of properly.

For further questions about Ohio regulations, please contact the [OEPA](#)

As of February 19, 2019, Stericycle is the only vendor licensed in Ohio to manage Category A Infectious Substances. They service both healthcare institutions, as well as, residential. A sample handling and packaging procedure protocol is included below. For further questions, please contact Stericycle.

References

1. [Ebola-Associated Waste Management](#)
2. U.S. Occupational Safety and Health Administration (OSHA) Bloodborne Pathogens Standard ([29 CFR 1910.1030](#))
3. [Interim - Planning Guidance for the Handling of Solid Waste Contaminated with a Category A Infectious Substance](#)
4. [Multi-society Statement on Processing Biohazardous Medical Waste](#)
5. [Interim Guidance for U.S. Residence Decontamination for Ebola and Removal of Contaminated Waste:](#)
6. [Ohio Environmental Protection Agency](#)

EXAMPLES OF CATEGORY A INFECTIOUS SUBSTANCES

([UN 2900, Infectious Substances Affecting Humans](#))

Note: The list below provides examples for guidance only. It is NOT an all-inclusive list.¹ Designations of “cultures only” means that the substance is only considered “Category A” when a pathogen(s) is intentionally propagated; the term “cultures” does not include patient specimens collected directly from humans or animals, including, but not limited to, excreta, secreta, blood and its components, tissue and tissue fluid swabs, and body parts being transported for purposes such as research, diagnosis, investigational activities, disease treatment and prevention.

<i>Bacillus anthracis</i> (cultures only)	Junin virus
<i>Brucella abortus</i> (cultures only)	Kyasanur forest disease virus
<i>Brucella melitensis</i> (cultures only)	Lassa virus
<i>Brucella suis</i> (cultures only)	Machupo virus
<i>Burkholderia mallei</i> — <i>Pseudomonas mallei</i> — Glanders (cultures only)	Marburg virus
<i>Burkholderia pseudomallei</i> — <i>Pseudomonas pseudomallei</i> (cultures only)	Monkeypox virus
<i>Chlamydia psittaci</i> —avian strains (cultures only)	<i>Mycobacterium tuberculosis</i> (cultures only)
<i>Clostridium botulinum</i> (cultures only)	Nipah virus
<i>Coccidioides immitis</i> (cultures only)	Omsk hemorrhagic fever virus
<i>Coxiella burnetii</i> (cultures only)	Poliovirus (cultures only)
Crimean-Congo hemorrhagic fever virus	Rabies and other lyssaviruses (cultures only)
Dengue virus (cultures only)	<i>Rickettsia prowazekii</i> (cultures only)
Eastern equine encephalitis virus (cultures only)	<i>Rickettsia rickettsia</i> (cultures only)
<i>Escherichia coli</i> , verotoxigenic (cultures only)	Rift Valley fever virus (cultures only)
Ebola virus	Russian spring-summer encephalitis virus (cultures only)
Flexal virus	Sabia virus
<i>Francisella tularensis</i> (cultures only)	<i>Shigella dysenteriae</i> type I (cultures only)
Guanarito virus	Tick-borne encephalitis virus (cultures only)
Hantaan virus	Variola virus
Hantaviruses causing hemorrhagic fever with renal syndrome	Venezuelan equine encephalitis virus (cultures only)
Hendra virus	Vesicular stomatitis virus (cultures only)
Herpes B virus (cultures only)	West Nile virus (cultures only)
Human immunodeficiency virus (cultures only)	Yellow fever virus (cultures only)
Highly pathogenic avian influenza virus (cultures only)	<i>Yersinia pestis</i> (cultures only)
Japanese Encephalitis virus (cultures only)	

¹ DOT/PHMSA, “[Transporting Infectious Substances Safely](#),” October 1, 2006, p. 12–13.

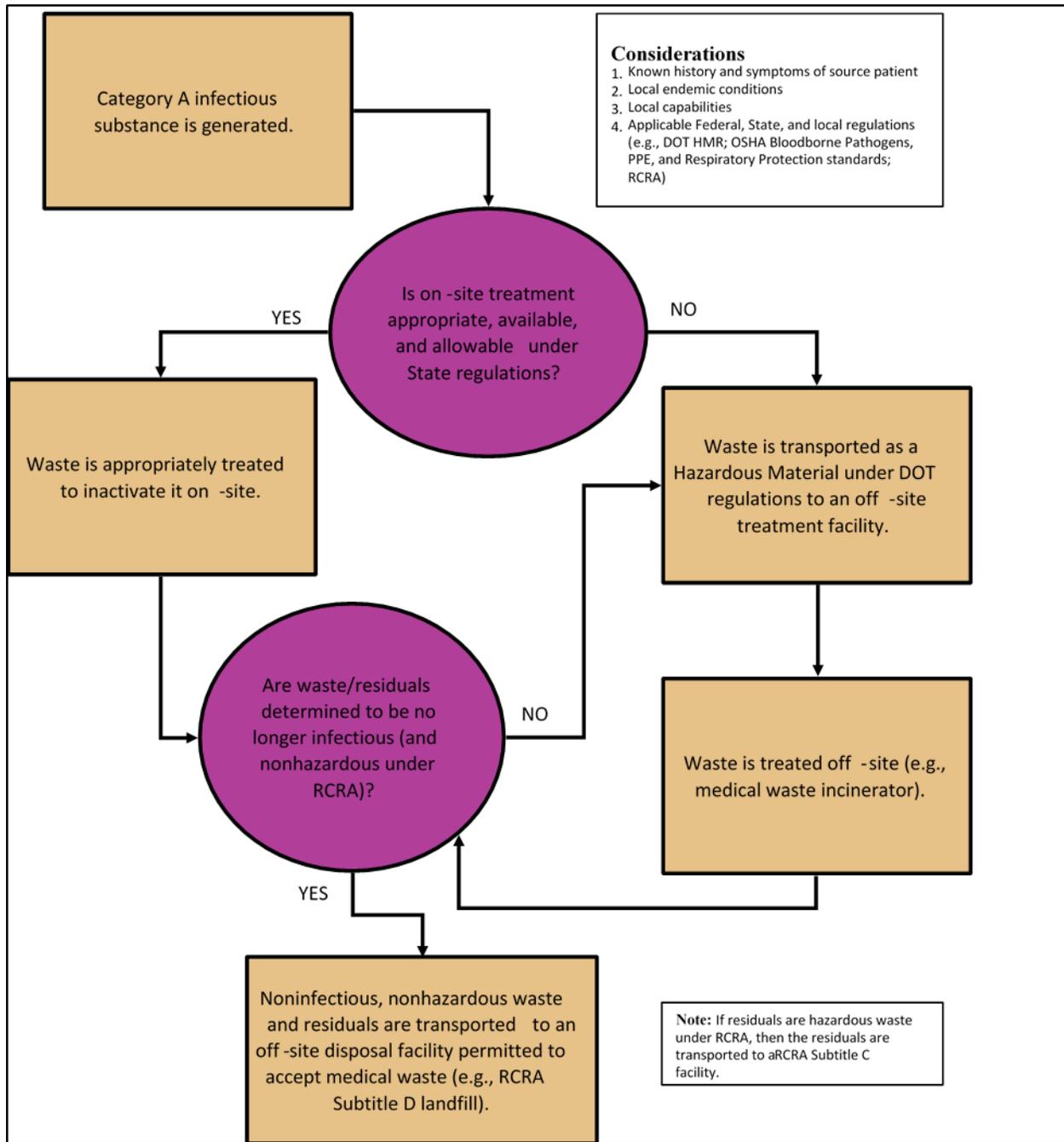
DECISION MATRIX FOR WASTE TREATMENT

The matrix below outlines key considerations for States to address future treatment of Category A-infected patients and to ensure that associated Category A-contaminated waste is properly inactivated and/or transported safely.

1.	Does the waste meet your State's definition of a regulated medical waste?	Yes = move to 2.
		No = dispose of as trash.
2.	Is the waste properly classified as UN2814, Infectious Substance Affecting Humans, 6.2?	Yes = move to 3
		No = dispose of according to the material's classification and your State requirements (e.g. as regulated medical waste).
3.	Does your facility have the capability to treat the waste on-site to the point of rendering the virus completely inactive (through autoclaving, or incineration, or other validated methods)?	Yes = inactivate on-site and dispose of treated material according to your State's requirements.
		No = move to 4.
4.	Do you have packaging available to contain Category A waste that complies with the HMR (i.e., packaging for Category A infectious substances that meet the requirements of 49 CFR § 173.196)?	Yes = package the waste using the compliant Category A packaging.
		No = move to 5.
5.	Is the waste contaminated with Ebola?	Yes=move to 6.
		No= Contact PHMSA to discuss a special permit for waste transportation for Category A infectious substances other than Ebola. Currently, there is only a DOT Special Permit for Ebola.
6.	DOT Special Permit 16279 provides alternative requirements for packaging and transporting Ebola waste. DOT/PHMSA's special permits database contains records of the companies currently holding party status to DOT-SP 16279. Special Permits Search: Put "16279" in the "Special Permit" box and search to display all entities that have held party status. www.phmsa.dot.gov/hazmat/regs/sp-a/specialpermits/search Have you contracted with one of the companies listed as a party to DOT-SP 16279?	Yes = the company with party status to DOT-SP 16279 has authority to transport the waste under alternative requirements, and it has trained its staff in loading, transporting, and unloading the material at a disposal facility. 7. Contact the company to discuss scheduling waste removal. Move to 7.
		No = contact a company with party status to DOT-SP 16279 to determine whether it is available to assist with handling your waste. 8. If no companies respond affirmatively, contact DOT/PHMSA to discuss next steps. ²
7.	Does your waste transportation contractor have access to a disposal or treatment facility where it can unload your waste?	Yes = schedule transportation with your contractor, making sure to inform DOT of the planned movement of the waste and its arrival at the disposal site.
		No = work with your contractor to identify why it does not have access to a disposal facility.

² You can reach DOT/PHMSA's Hazardous Materials Information Center by phone at 1-800-467-4922.

DECISION TREE FOR TREATMENT AND DISPOSAL OF CATEGORY A INFECTIOUS SUBSTANCES



Waste Management Vendors with Special Permit 16279 (updated 03/21/19*)

SP Number	Tracking Number	Company	City	State	Expiration Date
SP16279	2016010865	Smith Systems Transportation Inc.	Scottsbluff	NE	12/31/2019
SP16279	2015060018	Progressive Environmental Services, Inc.	Panama City Beach	FL	05/31/2019
SP16279	2015060161	AEG Environmental Products & Services, Inc.	Westminster	MD	05/31/2019
SP16279	2016086086	VEOLIA ES TECHNICAL SOLUTIONS LLC	LOMBARD	IL	09/30/2020
SP16279	2016096308	TERRABELLA ENVIRONMENTAL SERVICES INC	PLEASANTON	TX	08/31/2020
SP16279	2017016818	DANIELS SHARPSMART, INC.	CHICAGO	IL	03/31/2021
SP16279	2017016891	ADVANTRA GROUP INC.	ATLANTA	GA	12/31/2020
SP16279	2017027005	STERICYCLE, INC.	LAKE FOREST	IL	04/30/2021
SP16279	2017027102	MEDIWASTE DISPOSAL, LLC	ANAHEIM	CA	03/31/2021
SP16279	2017037345	ADVANT-EDGE SOLUTIONS OF MIDDLE ATLANTIC, INC.	NEWARK	DE	03/31/2021
SP16279	2017067894	HAWAII BIO WASTE SYSTEMS INC	HONOLULU	HI	06/30/2021
SP16279	2017067921	TRIUMVIRATE ENVIRONMENTAL, INC	SOMERVILLE	MA	06/30/2021
SP16279	2018080465	CLEAN HARBORS, INC.	NORWELL	MA	12/31/2022

*References: Pipeline and Hazardous Materials Safety Administration Special Permit [Search Page](#).



Category A Waste Handling & Packaging Procedures Guidelines for a Suspected or Confirmed Case of Ebola

- With a suspected or confirmed Ebola case immediately contact the local/state health department and CDC.
- All waste generated from a suspected/confirmed patient should be treated as special Category A DOT waste as follows:
 1. Make sure you are utilizing all PPE and following all applicable guidelines as directed by the [CDC](#)
 2. Place soft waste or sealed sharps containers into a primary medical waste bag (min 1.25 or 1.5ml – ASTM tested; can be provided by Stericycle).
 3. Apply bleach or other viricidal disinfectant into the primary bag to sufficiently cover the surface of materials contained within the bag; securely tie the bag.



4. Treat the exterior surface of the primary container with bleach or other viricidal disinfectant.
5. Place the primary bag into a secondary bag and securely tie the outer bag.
6. Treat the exterior surface of the secondary bag with bleach or other viricidal disinfectant.

***If you HAVE Stericycle 55 gallon special Category A DOT Waste “GREEN DRUMS” on site, go to Step 10 below.**

****If you DO NOT have special Stericycle 55 gallon special Category A DOT Waste “Green Drums” on site, continue to step 7.**

7. The double bagged waste should then be placed on a hard, non-porous surface in a secure room close to the point of use. Make sure the collection area is clearly labeled special Category A DOT Waste.
8. Contact your Stericycle representative who will arrange delivery of the special Category A DOT Waste containers (containers can be shipped for overnight delivery).
9. As soon as your special Category A DOT Waste Containers arrive follow step 10 below.
10. The double bagged waste should then be placed into special Category A DOT Waste packaging/drums provided by Stericycle with the liner tied securely and container closed per the packaging instructions provided. Label the special Category A DOT Waste with provided labels.

11. Store the special Category A DOT Waste containers separate from other regulated medical waste in a secure area preferably isolated and with limited access.
- Stericycle recommends using disposable sharps containers for suspected/confirmed Ebola cases. The disposable container should be sealed and disposed of as special Category A waste following the instructions above. If a reusable sharps container is inadvertently used that container should also be sealed and disposed of inside the bags with the Category A waste.
 - Contact your Stericycle representative who will begin the process with the DOT to acquire a “Special Permit” as required.
 - *Stericycle has been advised by the DOT and CDC that we must address each situation on a case by case basis until such time that they have an all-encompassing protocol.*
 - *Once the Special Permit has been granted, Stericycle will provide a current copy of the special permit to be maintained at the Generator’s site as per DOT regulations.*
 - *Contact your Stericycle representative should you need additional supplies to properly package Category A waste.*
 - *We will develop additional guidance for contingency planning as more information becomes available.*

Additional information sources:

- [The Centers for Disease Control and Prevention](#)
- [Interim Guidance for Environmental Infection Control in Hospitals for Ebola Virus](#)
- [Packaging of Ebola Contaminated Waste](#)

Appendix 10: PPE Resources

National Guidance:

The CDC provides guidance on the types of PPE to be used and the processes for donning (putting on) and doffing (removing) PPE for all personnel entering the room of a patient hospitalized with Ebola. The guidance reflects lessons learned from the recent experiences of US hospitals caring for patients with EVD and emphasizes the importance of training, practice, competence, and observation of healthcare workers, especially in correct donning and doffing of PPE.

In healthcare settings, Ebola is spread through direct contact with blood or body fluids of a person who is sick with Ebola or with objects (e.g., bathroom surfaces, medical equipment) that have been contaminated with infectious blood or body fluids. To protect healthcare workers who are caring for patients with Ebola, healthcare facilities must provide on-site management and over-sight of adherence to safe PPE use and implement administrative and environmental controls. Direct observation of healthcare workers with continuous safety checks during the PPE donning and doffing process is recommended.

Key Points from CDC guidance:

1. HCWs caring for patients with Ebola must have received comprehensive training .
2. HCWs must demonstrated competency in performing Ebola-related infection control practices and procedures.
3. PPE that covers the clothing and skin and completely protects mucous membranes is required when caring for patients with Ebola.
4. Personnel providing care to patients with Ebola must be supervised by an onsite manager at all times, and a trained observer must supervise each step of every PPE donning/doffing procedure to ensure established PPE protocols are completed correctly.
5. Individuals unable or unwilling to adhere to infection control and PPE use procedures should not provide care for patients with Ebola.

TRAINING

See the [training videos](#) provided by the OHA on the proper donning and doffing of PPE.

INVENTORY

The CDC recommends a tiered approach to maintaining a PPE inventory. To allow for appropriate planning, certain agencies have suggested an average number of PPE changes per worker per shift as 6-10.

1. Frontline Hospitals: Sufficient to cover 12-24 hours of patient care.
2. Ebola Assessment Hospitals: Sufficient for 4-5 days of patient care
3. Ebola Treatment Centers: Sufficient for at least 7 days of patient care

RECOMMENDATIONS: PPE recommended for U.S. healthcare workers caring for patients with Ebola includes:

1. Double gloves
2. Boot covers that are waterproof and go to at least mid-calf or leg covers

3. Single-use fluid resistant or impermeable gown that extends to at least mid-calf or coverall without integrated hood
4. Respirators, including either N95 respirators or powered air purifying respirator (PAPR)
5. Single-use, full-face shield that is disposable
6. Surgical hoods to ensure complete coverage of the head and neck
7. Apron that is waterproof and covers the torso to the level of the mid-calf (and that covers the top of the boots or boot covers) should be used if Ebola patients have vomiting or diarrhea

References

1. [Guidance on Personal Protective Equipment \(PPE\) To Be Used By Healthcare Workers During Management of Patients with Confirmed Ebola or Persons Under Investigation \(PUIs\) for Ebola who are Clinically Unstable or Have Bleeding, Vomiting, or Diarrhea in U.S. Hospitals, Including Procedures for Donning and Doffing PPE](#)
2. [Considerations for U.S. Healthcare Facilities to Ensure Adequate Supplies of Personal Protective Equipment \(PPE\) for Ebola Preparedness](#)
3. [CDC PPE Calculator](#)
4. [Ebola Personal Protective Equipment \(PPE\)](#)
5. For U.S. Healthcare Settings: [Donning and Doffing Personal Protective Equipment \(PPE\) for Evaluating Persons Under Investigation \(PUIs\) for Ebola Who Are Clinically Stable and Do Not Have Bleeding, Vomiting, or Diarrhea](#)
6. [Personal Protective Equipment for use in a Filovirus Disease Outbreak](#)
7. [How to put on and how to remove Personal Protective Equipment \(posters\)](#)

Ohio Guidance:

1. Doffing support for EMS: Receiving hospital to provide EMS crew with supplies, scrubs, decontamination for both people and vehicle. Confirm this with the “EMS Cheat Sheet” on file with the RHCs.
2. Carry donning and doffing protocols in vehicles so hospitals can assist upon arrival.

Appendix 11: Mortuary Planning

National Guidance:

Given the systems currently in place to identify people with Ebola virus disease (EVD), any Ebola-related deaths in the United States would likely occur within a hospital setting. The Ebola virus can be detected throughout the bodies of patients who die of the disease. Ebola can be transmitted in postmortem care settings by laceration and puncture with contaminated instruments used during postmortem care, by handling human remains without recommended PPE, and through splashes of blood or other body fluids such as urine, saliva, feces, or vomit to unprotected mucosa such as eyes, nose, or mouth during postmortem care.

In addition to federal laws and guidelines that apply to mortuary workers, mortuary practices and workers may also be subject to a variety of state, tribal, territorial, and local regulations. Consult officials or licensed attorneys in your jurisdiction for additional guidance on laws that affect mortuary practices. CDC recommends close collaboration with public health officials in the state or local jurisdiction, as well as with the licensed funeral director who has agreed to accept the bagged remains, to safely implement each step of the process.

Key points from CDC guidance:

1. Ebola virus can be transmitted in postmortem care settings through unsafe handling of remains.
2. Ensure that only personnel trained in handling infected human remains and wearing recommended PPE touch or move any remains that contain Ebola virus.
3. Do not wash or clean the body.
4. Do not embalm the body.
5. Do not perform an autopsy. If an autopsy is necessary, consult the state health department and CDC regarding necessary precautions.
6. Do not remove any inserted medical equipment from the body such as intravenous (IV) lines, endotracheal or other tubing, or implanted electronic medical devices.
7. Cremate the body. If cremation cannot be done because of safety concerns, the body should be buried in a standard metal casket or other comparable burial method.

References

1. [Guidance for Safe Handling of Human Remains of Ebola Patients in U.S. Hospitals and Mortuaries](#)
2. [Mortuary Guidance Job Aid: Postmortem Preparation in a Hospital Room](#)
3. [Safe and Dignified Burials, World Health Organization](#)
4. [Use Safe Burial Practices, World Health Organization](#) (this document is for Viral Hemorrhagic Fever (VHF), but it's a similar process for Ebola)

Ohio Guidance:

1. The [Ohio Mortuary Operational Response Team](#) (OMORT) may also be a resource to assist with an Ebola-related death. The team has the skills needed to respond, but may need assistance with equipment.
2. A list of crematoriums that are willing to accept the remains of an expired patient with Ebola with or without implanted medical devices:

Location	Address	Contact Person
Cincinnati	Greater Cincinnati Crematory 1919 Thinnes Avenue Cincinnati, Ohio 45124 (513) 315-5420	Mark Piorkowski
Cleveland	E.F. Boyd & Son Funeral Home 1265 East 89th Street Cleveland, Ohio 44106 (216) 470-1752	Juan C. Ferebee jferebee@efboyd.com
Columbus	Edwards Crematory (dba ACE Services) 686 Harmon Plaza Columbus, Ohio 43223 (614) 444-3200	Jeff Edwards
Toledo Area	Turner Vault Company (dba Toledo Cremation Service) 1021 Warwick Avenue Toledo, Ohio 43607 (419) 537-8713	Steve Turner
	Edgar-Grisier FH (dba The Cremation Center) 419 West Elm Street Wauseon, Ohio 43567 (419) 335-6031	Todd Grisier

Appendix 12: Considerations for Outpatient Care

National Guidance:

The CDC provides guidance to help ambulatory care staff members evaluate whether a patient might have Ebola Virus Disease (EVD). Staff members in ambulatory care settings should use this guidance to follow the 3 steps of the “Identify, Isolate, and Inform” strategy. CDC previously recommended staff members screen all patients with travel histories, exposure, or clinical symptoms that might suggest the person could have EVD.

Key points from earlier CDC guidance included:

1. Most patients with fever and other symptoms coming to an ambulatory care facility don’t have EVD, but it is important that staff members know how to identify and manage patients who might have EVD.
2. Staff members should be ready to take 3 steps: Identify, Isolate, and Inform.
3. Ask every patient if, in the last 21 days, they traveled to [a country with widespread transmission or uncertain control measures](#), or had contact with someone with confirmed EVD.
4. If a patient appears to be at risk for EVD, isolate the patient immediately, avoid unnecessary direct contact, determine personal protective equipment needed, and notify the health department to arrange a transfer to a facility that can further assess the patient.
5. Do not transfer the patient without first notifying the health department; these patients should only be transferred to a facility approved by public health authorities.
6. Patients should not drive themselves or family members to a hospital. Such cases should go through the previously described process to determine the correct destination facility, then transported by appropriate EMS units.

References

1. Outpatient and Ambulatory Care Settings: <https://www.cdc.gov/vhf/ebola/clinicians/outpatient-settings/index.html>

Ohio Guidance:

From the OEPC Patient Care Subcommittee:

1. EARLY Recognition is key. Any visit marked as “urgent” should get travel screened, unless it is for a routine doctor’s appointment.
2. Anything matching the symptoms and travel history should be reported to the local health department.
3. For outpatient care facilities that are tied to a hospital system, work with your organization to create a notification plan.

Appendix 13: Training and Education Resources

National Guidance:

1. [The National Ebola Training and Education Center \(NETEC\)](#)
2. [CDC's Ebola Virus Disease Resource Page](#)

Ohio Guidance

1. Ohio-specific EVD guidance documents can be found on the Ohio Public Health Communication System (OPHCS) using the following pathway:
 - Document library → Epi issues → Ebola folder → CONOPS folder
2. The OHA hosts a series of training modules on their website at [HERE](#).

Appendix 14: Record of Changes



Change of Record Form

Agency Name: Ohio Hospital Association

Name of Plan: Guidance Document for the Management of Suspected and Confirmed Cases of Ebola in the State of Ohio

Change #	Change Date	Page # of Change	Description of change	Effective date
1.	8/7/18	All	Drafted Document	8/7/18
2.	10/25/18	All	Revised Document based on suggestions	10/25/18
3.	12/31/18	All	Revised document to add national and Ohio specific guidance in appendices	12/31/18
4.	1/11/19	All	General revisions and updates to guidance references.	1/14/19
5.	1/28/19	All	Assignments added for OEPC review	1/30/19
6.	2/6/19	All	OHA review of edits.	2/8/19
7.	2/11/19	All	Final review of draft before OEPC review.	2/11/19
8.	3/14/19	All	Reviewed and incorporated suggestions from the OEPC.	3/15/19
9.	4/4/19	All	ODH review and comments in whole document	4/4/19
10.	4/5/19	All	Review of ODH comments and additional revisions to the whole document	4/5/19
11.	5/10/19	All	Review of document based on findings from FE.	5/10/19
12.	5/28/19	All	Adopted per guidance of OEPC.	6/3/19
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Appendix 15: Abbreviations and Acronyms

Acronym	Definition
AGP	Aerosol-Generating Procedure
AM	Active Monitoring
ASPR	Assistant Secretary for Preparedness and Response
BID	Bureau of Infectious Diseases
CARE	Check and Report Ebola
CDC	U.S. Centers for Disease Control and Prevention
DAM	Direct Active Monitoring
DOC	Department Operations Center
DOT	U.S. Department of Transportation
EAH	Ebola Assessment Hospital
ED	Emergency Department
EMA	Emergency Management Agency
EMS	Emergency Medical Services
EOC	Emergency Operations Center
ETC	Ebola Treatment Center
EVD	Ebola Virus Disease
FHF	Frontline Healthcare Facility
FOA	Funding Opportunity Announcement
ID	Infectious Disease
IDCM	Infectious Disease Control Manual
HCW	Healthcare Worker
HHS	U.S. Department of Health and Human Services
HMR	Hazardous Materials Regulations
HPP	Hospital Preparedness Program
LHD	Local Health Department
LRN	Laboratory Response Network
MCP	Medical Control Physician
MOU	Memorandum of Understanding
MMRS	Metropolitan Medical Response System
NETEC	National Ebola Training and Education Center
NGO	Non-Governmental Organization
NIOSH	National Institutes of Occupational Safety and Health
ODH	Ohio Department of Health
OEMA	Ohio Emergency Management Agency
OEMS	Ohio Emergency Medical Services
OEPA	Ohio Environmental Protection Agency
OEPC	Ohio Emerging Pathogens Coalition
OERS	Ohio Emergency Response System
OHA	Ohio Hospital Association
OMORT	Ohio Mortuary Operational Response Team
OPHCS	Ohio Public Health Communication System
ORC	Ohio Revised Code
OSHA	Occupational Safety and Health Administration

Acronym	Definition
PAPR	Powered Air Purifying Respirator
PHEP	Public Health Emergency Preparedness
PPE	Personal Protective Equipment
PSAP	Public Safety Answering Points
PUI	Person / Patient Under Investigation
RETC	Regional Ebola Treatment Center
RHC	Regional Healthcare Coordinator
RPHC	Regional Public Health Coordinator
SEOC	State Emergency Operations Center
SME	Subject Matter Expert
VHF	Viral Hemorrhagic Fever
WHO	World Health Organization

Appendix 16: Definition of Terms

Doffing: The process of removing used personal protective equipment.

Donning: The process of putting on clean personal protective equipment

Ebola Virus Disease (Ebola): Previously known as Ebola hemorrhagic fever. A rare and deadly disease caused by infection with one of the Ebola virus strains. Ebola can cause disease in humans and nonhuman primates (monkeys, gorillas, and chimpanzees).

Hospital Preparedness Program (HPP): A program managed by HHS/ASPR that provides leadership and funding through grants and cooperative agreements to states, territories, and eligible municipalities to improve surge capacity and enhance community and hospital preparedness for public health emergencies.

Jurisdiction: For the purpose of this document the term refers to the state, territorial, and major metropolitan area awardees who receive funds through the ELC, PHEP cooperative agreements, and HPP grants.

Public Health Emergency Preparedness (PHEP) Cooperative Agreement: A program administered by CDC's Office of Public Health Preparedness and Response, Division of State and Local Readiness to help public health departments strengthen their abilities to respond to all types of public health incidents and build more resilient communities.

Person Under Investigation (PUI): The [case definition](#) from the CDC for a Person Under Investigation (PUI) is a person who has both consistent signs or symptoms and risk factors as follows should be considered a PUI:

- Elevated body temperature or subjective fever or symptoms, including severe headache, fatigue, muscle pain, vomiting, diarrhea, abdominal pain, or unexplained hemorrhage; **AND**
- An epidemiologic risk factor within the 21 days before the onset of symptoms.

For the purposes of this document, the term “PUI” will be used interchangeably to encompass a Person Under Investigation, a Patient Under Investigation, and a Suspect Patient. All of these terms are meant to refer to a person that meets the symptoms, risk factors, and travel history for Ebola but have not been confirmed by laboratory testing.

Tiered Hospital System in the United States: To create a coordinated networked approach, state and local health officials, in collaboration with hospital and healthcare facility executives, may designate healthcare facilities across the state to serve in one of three suggested roles outlined in this Guidance Document.

- Frontline Hospitals screen, isolate, and transfer for testing and possibly treatment.
- Assessment Hospitals screen, isolate, conduct differential and confirmatory testing and transport to treating facility.
- Ebola Treatment Centers can screen, isolate, conduct all testing, and offer treatment under research protocols, for the duration of the patient’s illness.

- Regional Ebola Treatment Centers have enhanced preparedness capabilities needed to manage other high containment, Ebola-like infectious diseases in the future. They are required to take patients from their region, and if needed from across the US, as well as those medically evacuated from overseas.

Appendix 17: Approval Page

This Guidance Document has been reviewed and approved by the Ohio Emergency Pathogens Coalition on May 23, 2019.

The Ohio Emergency Pathogens Coalition
